

Amendments to the Claims

The following Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A fiber optic receiver, comprising:
a substrate;
a receiver optical sub-assembly (ROSA) mounted on the substrate and comprising a fiber optic connector for coupling to a mating connector of a fiber optic cable;
an opto-electronic transducer incorporated within the ROSA and configured to generate an electrical data signal in response to a received optical data signal over a specified range of optical power;
a preamplifier circuit incorporated within the ROSA, coupled to the opto-electronic transducer, and operable to linearly amplify ~~an~~ the electrical data signal generated by the opto-electronic transducer over the specified range of optical power; and
an adjustable bandwidth post-amplifier circuit mounted on the substrate and coupled to an output of the preamplifier circuit.

Claim 2 (original): The fiber optic receiver of claim 1, wherein the post-amplifier circuit comprises a switch for setting a bandwidth response of the post-amplifier circuit in response to a received data rate control signal.

Claim 3 (original): The fiber optic receiver from claim 2, wherein the post-amplifier circuit further comprises a low-pass filter coupled to the switch.

Claim 4 (original): The fiber optic receiver of claim 3, wherein the low-pass filter comprises a capacitor.

Claim 5 (original): The fiber optic receiver of claim 1, wherein the post-amplifier circuit comprises a voltage-variable capacitor.

Claim 6 (original): The fiber optic receiver of claim 1, wherein the post-amplifier circuit comprises a wide bandwidth signal path and a narrow bandwidth signal path.

Claim 7 (original): The fiber optic receiver of claim 6, wherein the post-amplifier circuit further comprises a multiplexer configured to selectively present for output electrical data signals transmitted over one of the wide bandwidth signal path and the narrow bandwidth signal path in response to a received data rate control signal.

Claim 8 (original): The fiber optic receiver of claim 6, wherein the wide bandwidth signal path comprises an amplifier with a relatively wide bandwidth response and the narrow bandwidth signal path comprises an amplifier with a relatively narrow bandwidth response.

Claim 9 (original): The fiber optic receiver of claim 1, wherein the post-amplifier comprises an input gain buffer coupled to the output of the preamplifier circuit.

Claim 10 (canceled)

Claim 11 (previously presented): The fiber optic receiver of claim 1, wherein the ROSA comprises a header module mounted on the substrate and housing the opto-electronic transducer and the pre-amplifier circuit.

Claim 12 (original): The fiber optic receiver of claim 1, wherein the opto-electronic transducer comprises a photodiode.

Claim 13 (previously presented): The fiber optic receiver of claim 1, wherein the adjustable bandwidth post-amplifier circuit is located outside of the ROSA.

Claim 14 (previously presented): The fiber optic receiver of claim 6, wherein each of the wide bandwidth signal path and the narrow bandwidth signal path is connected to the output of the pre-amplifier circuit.

Claim 15 (previously presented): The fiber optic receiver of claim 11, further comprising electrical connectors extending from the opto-electronic transducer and the pre-amplifier circuit, through the header module, and to the substrate.

Claim 16 (new): The fiber optic receiver of claim 1, wherein the post-amplifier circuit has a high bandwidth state characterized by a first cutoff frequency and a low bandwidth state characterized by a second cutoff frequency lower than the first cutoff frequency.

Claim 17 (new): The fiber optic receiver of claim 16, wherein the first cutoff frequency is in a range of 1.5 GHz to 2.5 GHz and the second cutoff frequency is in a range of 0.5 GHz to 1.5 GHz.

Claim 18 (new): The fiber optic receiver of claim 16, further comprising a switch configured to set the post-amplifier circuit in the high bandwidth state when a received data rate control signal corresponds to a first data rate of the optical data signal and to set the post-amplifier circuit in the low bandwidth state when the received data rate control signal corresponds to a second data rate of the optical data signal lower than the first data rate.